



Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

PCT/IB 03/03943

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03M13/27 G06F7/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H03M G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 517 241 A (LSI LOGIC CORP) 9 December 1992 (1992-12-09) abstract; figure 3	1-7
X	EP 0 361 806 A (ADVANCED MICRO DEVICES INC) 4 April 1990 (1990-04-04) abstract; figures	1-7
A	WO 00 70771 A (SAMSUNG ELECTRONICS CO LTD) 23 November 2000 (2000-11-23) the whole document	4-7
A	US 6 392 572 B1 (SHIU DA-SHAN ET AL) 21 May 2002 (2002-05-21) the whole document	4-7

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

2 December 2003

Date of mailing of the international search report

05/01/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Verhoof, P

INTERNATIONAL SEARCH REPORT

PCT/JP 03/03943

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0517241	A	09-12-1992	EP 0517241 A2	09-12-1992
			JP 5197741 A	06-08-1993
EP 0361806	A	04-04-1990	US 4894626 A	16-01-1990
			AT 114201 T	15-12-1994
			DE 68919401 D1	22-12-1994
			DE 68919401 T2	04-05-1995
			EP 0361806 A2	04-04-1990
			JP 2122498 A	10-05-1990
WO 0070771	A	23-11-2000	AU 752231 B2	12-09-2002
			AU 4621300 A	05-12-2000
			CA 2337918 A1	23-11-2000
			CN 1318225 T	17-10-2001
			DE 20023169 U1	24-04-2003
			EP 1097516 A1	09-05-2001
			JP 3359912 B1	24-12-2002
			JP 2003500885 T	07-01-2003
			WO 0070771 A1	23-11-2000
			KR 2000077350 A	26-12-2000
			US 6598202 B1	22-07-2003
US 6392572	B1	21-05-2002	WO 02093755 A1	21-11-2002